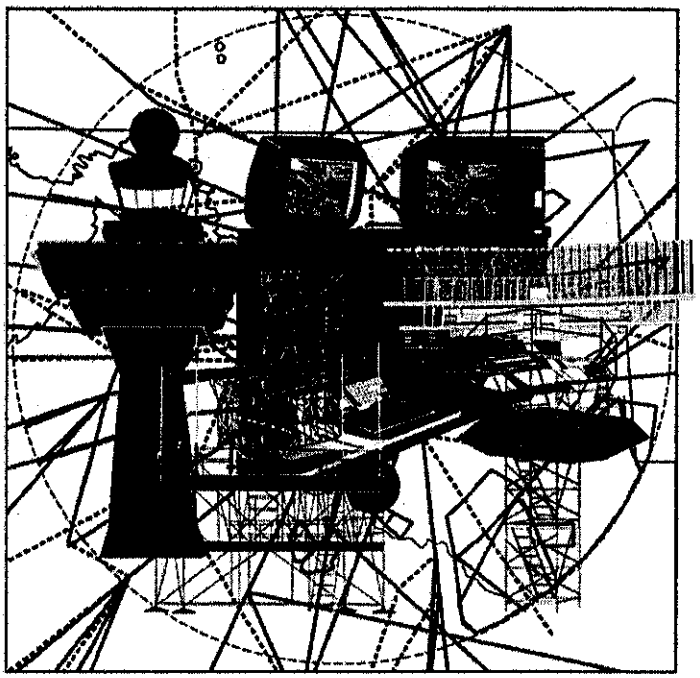
Record Of Decision

Potomac Consolidated TRACON Airspace Redesign



May 2003

Prepared By

U.S. Department of Transportation
Federal Aviation Administration

Table of Contents

Department of Transportation
Federal Aviation Administration

Record of Decision

Potomac Consolidated TRACON
Airspace Redesign

Section 1 Summary of Proposed Action

In accordance with the National Environmental Policy Act of 1969 and FAA Order 1050.1D, Policies and Procedures for Considering Environmental Impacts, the Federal Aviation Administration (FAA) has made a final determination to modify aircraft routes, altitudes and air traffic control procedures used in a 23,000 square mile area around Washington, DC. These procedures relate to aircraft arriving and departing from Andrews Air Force Base (ADW), Baltimore-Washington International Airport (BWI), Dulles International Airport (IAD), Reagan Washington National Airport (DCA) and other smaller area airports.

The revised aircraft routes, altitudes and procedures will be established in a manner consistent with the alternative "Existing Peripheral Airspace Ingress/Egress Transfer Points with New Internal Airspace Design," Alternative 2, identified as the preferred alternative in the Final Environmental Impact Statement (FEIS), Potomac Consolidated TRACON (PCT) Airspace Redesign, prepared by the FAA and dated December 2002. The FAA issued the FEIS on January 10, 2003. The FEIS analyzed four alternatives in detail.

- The No Action alternative would not change existing routes, altitudes and air traffic control (ATC) procedures in the study area.
- Alternative 1 envisions new peripheral airspace ingress/egress transfer points with a new internal (within PCT area of control) airspace design.
- Alternative 2 would use existing peripheral airspace ingress/egress transfer points with a new internal airspace design. This alternative is identified as the preferred alternative and the environmentally preferred alternative in the FEIS.
- Alternative 3b would provide a combination of new and existing peripheral airspace ingress/egress transfer areas with a new internal airspace design. This alternative would utilize a corner post concept with arrival transfer areas.

Section 2 Purpose and Need for the Action

The purpose of this airspace redesign is to take full advantage of the benefits afforded by the newly consolidated PCT facility by increasing air traffic efficiency and enhancing safety in the Baltimore-Washington metropolitan area.

There are three overriding reasons to consider airspace redesign for the Baltimore-Washington metropolitan area: 1) growth in demand, 2) air traffic control inefficiencies, and 3) planned capability. These three reasons are discussed in the following subsections.

Growth in Demand

Over 27.4 million passengers were enplaned at BWI, DCA, and IAD in fiscal year (FY) 2000. The EIS projected that number to increase to 28.2 million by the year 2005 using prior year FAA Office of Aviation Policy and Plans (APO) projections. The most recent (March 2003) APO forecast predicts slower growth in demand due to a number of socioeconomic factors and the impacts of September 11, 2001. Total enplanements are now forecast to reach an annual volume of 26.4 million passengers by 2005, reflecting approximately a 3.8% decrease in previously forecast enplanements for BWI, DCA and IAD for this period. APO expects that the previously forecast levels should be realized between 2006 and 2007. Although the rate of growth has slowed, all indications are that volume will significantly increase in coming years

During peak traffic periods before September 11, 2001, the Baltimore-Washington metropolitan area has experienced air traffic delays. Although there has been a recent dip in demand, the demand for services is projected to increase as evidenced by the extensive mid-term expansion plans, including new runways, at BWI and IAD. More efficient use of the Baltimore-Washington metropolitan area airspace, without compromising safety, is needed if the projected system demand is to be met without excessive delays for the flying public.

In addition to the commercial service airports in the area, ADW generates a heavy volume of national security-sensitive air traffic including presidential, congressional, and diplomatic flights. The need to effectively and efficiently move this traffic has received increased emphasis as a result of the recent increased focus on security.

Air Traffic Control Inefficiencies

The movement of aircraft within the airspace as presently configured has become increasingly inefficient. The era of aviation deregulation witnessed a dramatic and unpredictable growth in the demand for air traffic services.

The proximity of high performance jet aircraft operating in and out of four major airports creates a complex air traffic control environment. National security requirements in and around the District have also resulted in numerous restrictions being placed on airspace use. The combined factors of increased traffic volume, proximity of airports, the mix of aircraft with widely varying operating characteristics, and special-use airspace requirements, have compounded operational complexity and degraded overall operational efficiency. These inefficiencies are further categorized as communication, boundary, arrival and departure inefficiencies and are discussed in the following sections.

Communication Inefficiencies. The four area TRACONs each had separate radar, flight data processing automation and communication systems. This means that the four TRACONs operated using separate automation systems that did not allow rapid exchange of data among controllers in adjacent facilities.

The establishment of the PCT has provided a single radar facility for controlling all aircraft in the Baltimore-Washington metropolitan area away from the arrival/destination airports. The PCT will ultimately house all the areas' TRACON controllers in one facility with one automation platform that will provide dramatically improved opportunity for coordination. This enhanced capability provides the opportunity for integrated procedures that promote user efficiencies and enhance safety especially during inclement weather conditions.

The PCT allows controllers (formerly from the four separate TRACONs) to have real-time information on aircraft in the Baltimore–Washington area, and more effective communication with all controllers in the PCT. This ability will enhance safety and reduce communications delays for flights that traverse the area. It will also allow redesigning routes in order to benefit from the improved communication capability.

Boundary Inefficiencies. There are approximately 64 altitude/speed restrictions as aircraft transition between inter-facility boundaries with the airspace controlled by the previously existing four TRACONs. As stated earlier, prior to consolidation, each facility operated using its own communications, automation and radar systems that share limited inter-facility links.

In lieu of coordinating each aircraft with the receiving controller, sets of standard procedures were developed to allow "silent hand-offs" of aircraft between facilities. These result in predetermined "one size fits all" altitude and speed restrictions for that particular boundary crossing to ensure a full measure of safety when transferring an aircraft from one facility to another. When these pre-determined altitudes were designed, the designers took into consideration the worst performing aircraft and set the standards accordingly. This currently has the effect of penalizing higher performance aircraft. In the worst-case scenario, the higher performance aircraft may be penalized (i.e., by slower speeds, specific altitudes) when there are no other aircraft in proximity, across the facility boundary.

In the PCT, all controllers will use the same automation and communication system, thus ensuring the capability to display all of the information within the PCT's airspace boundaries that a controller may need. In addition, a controller will have instant voice access to any other controller in the consolidated facility. The ability to have this instant access with a common communication system and full flight data information from the common automation system will eliminate the need for many of the present speed and altitude restrictions. Redesign of the airspace would permit elimination of the present airspace boundary restrictions.

Arrival Inefficiencies. There are numerous arrival fixes in the Baltimore-Washington metropolitan area. Many arrival streams are eventually consolidated through controller vectoring, the merging of incoming flows of aircraft as they approach their destination

airport. This process effectively funnels aircraft toward their destination airport. Aircraft routes are consolidated and the distance between aircraft is compressed as aircraft approach their destination airport. Many of these arrival procedures prescribe radar vectors that steer a landing aircraft a considerable distance from the intended arrival airport at lower altitudes to allow departure traffic to climb above the arrivals. As aircraft are descended, fuel usage and noise levels increase. An additional consequence is that jets are mixed with turboprop and prop aircraft at the lower altitudes, requiring controllers to pay considerable attention to the different operating characteristics (including wake turbulence) of these dissimilar aircraft.

Departure Inefficiencies. Departing aircraft are also constrained by the four-TRACON airspace structure. Situations occur where departure aircraft are restricted to a specific altitude in order to cross boundaries between area TRACONs. In many cases, an altitude restriction is used to separate aircraft from an adjacent facility's airspace as opposed to another aircraft. Further, departure restrictions penalize newer, high performance aircraft the most by limiting their operating capabilities. Other departure aircraft are vectored great distances to cross into another facility's airspace at a specified point in space that meets the receiving facility's need. The consolidated TRACON permits the elimination of the existing inter-TRACON boundaries, allowing for more efficient routing of departures.

Planned Capability Improvement

Consolidation of the individual airspace controlled by each of the existing four TRACONs will enable altitude optimization and use of a "high downwind" operation at the primary airports in the area. All area airports could be served from multiple arrival fixes. Different altitudes would be used to ensure that aircraft going to the nearest airport would be lowest in the arrival pattern at a particular fix. Rather than vectoring arrivals farther out from the airport and descending the aircraft, these arrivals would be kept high enough to allow departure aircraft to exit the airport area beneath the arrival stream but not so high as to cause aircraft passenger discomfort during the descent. The departures would then be allowed to climb relatively unrestricted toward their departure gate/fix.

As a result of the PCT, aircraft routes and altitudes can be modified to take advantage of coordination improvements afforded by TRACON consolidation. The inefficiencies previously identified can be resolved through airspace redesign.

Purpose and Need Summary

The proposed action and Purpose and Need are summarized here:

- The proposed action is to redesign the airspace in the Baltimore-Washington metropolitan area.
- The purpose of this airspace redesign is to take full advantage of the benefits afforded by the newly consolidated TRACON facility allowing for increases in air traffic efficiency and enhanced safety in the Baltimore-Washington metropolitan area.

- The proposed action is needed to:
  - Meet the projected growth in aviation demand without inducing excessive delays and while maintaining safety of flight;
  - Resolve current air traffic control inefficiencies (affecting communications, boundaries, arrival and departure procedures) to handle existing and projected traffic demand;
  - Exploit the infrastructure improvements afforded by the TRACON consolidation by modifying aircraft routes and altitudes.

Section 3 Alternatives

In addition to the No Action alternative, three airspace redesign alternatives were considered in detail in the FEIS. The No Action alternative was considered in accordance with FAA Order 1050.1D guidelines. The alternatives are summarized as follows:

No Action Alternative

The existing airspace structure (the No Action Alternative) relies on a system of fixes, routes, and procedures to direct aircraft through PCT airspace. ATC operates in a systematic manner such that all flights between two airports are typically assigned to the same route. A series of gates and structured procedures are used to ensure safe separation between aircraft that are on opposite sides of the intra-facility boundaries.

Intra-facility boundaries refer to the internal walls of the PCT airspace structure. The walls are the former boundaries of the ADW, BWI, DCA, and IAD TRACONs that existed prior to TRACON consolidation.

The No Action alternative does not satisfy the purpose and need for the action. The No Action Alternative would retain the pre-consolidation air traffic control inefficiencies discussed in Section 2. With the projected growth in demand for air traffic control services in the area, retaining the existing routes, altitudes and procedures would lead to increased delays. Further, the No Action alternative would not capitalize on the infrastructure and single automation system provided by the consolidated TRACON.

Alternative 1 – New Peripheral Airspace Ingress/Egress Transfer Points with New Internal Airspace Design

Alternative 1 allows for more direct routing of aircraft by using flexible arrival and departure fixes that are not based on conventional ground-based navigational aids (NAVAIDs).

Alternative 1 uses area navigation to guide aircraft. Conventional navigation generally requires that aircraft be routed over ground-based NAVAIDs. Area navigation allows

fixes to be established virtually anywhere. Note that area navigation does not necessarily require use of flight management systems (FMS). Aircraft without area navigation capabilities would necessarily be vectored by ATC.

Some of the specific differences between Alternative 1 and the No Action alternative are:

- A new parallel downwind pattern (both left and right downwind legs) for BWI arrivals to Runway 33 would be created.
- A new departure track for jet departures to the southwest would be created at BWI.
- North flow ADW jet departures make right hand turns after departing the airfield.
- Southbound DCA Runway 04 jet departures would have a delayed turn to the south after departing the airfield.
- Philadelphia arrivals routed through PCT would be routed more directly to their destination.

Alternative 2 – Existing Peripheral Airspace Ingress/Egress Transfer Points with New Internal Airspace Design (Preferred Alternative)

Alternative 2 is the preferred alternative and the environmentally preferred alternative. Alternative 2 was conceived as a low-risk concept from the viewpoint of implementation. Alternative 2 does not significantly affect the airspace structure of ATC facilities adjacent to PCT airspace and, therefore, does not require major inter-facility coordination or approval. This means that the existing ingress and egress transfer points at the boundary of PCT airspace would remain essentially unchanged. Alternative 2 primarily proposes changes only to the airspace structure within the existing PCT airspace boundaries. Alternative 2 would remove the intra-facility boundaries and related constraints of the existing airspace structure.

Some of the specific differences between Alternative 2 and the No Action alternative are:

- For IAD departures, the AML (Armel) departure fix would be moved to the north to avoid crossing of arrivals from west.
- A new high right downwind pattern would be created for BWI arrivals to Runway 33L.
- A new high left downwind pattern would be created for IAD arrivals to Runway 01L.
- Southbound DCA Runway 04 jet departures would have a delayed turn to the south after departing the airfield.
- Alternative 2 would route the aircraft landing at IAD from the New York area to enter PCT airspace at the lowest useable flight level (i.e., an altitude of 18,000 feet or greater), instead of the current procedure that restricts aircraft to an altitude of 10,000 feet and airspeed of 250 knots.
- Aircraft landing at BWI, DCA and ADW from the north would also enter the PCT airspace at higher altitudes than they do in the existing airspace structure.

- Philadelphia arrivals routed through PCT would be routed more directly to their destination.

Alternative 3b – New/Existing Peripheral Airspace Ingress/Egress Transfer Areas with New Internal Airspace Design (includes Corner Post with Arrival Transfer Areas)

Alternative 3b is a derivative of the corner post system, which was discussed in Section 2.2 of the EIS under Alternative 3a. However, Alternative 3b uses transfer areas between adjacent ATC facilities and PCT. Transfer areas contain multiple fixes that are designated for either arrival or departure. The use of arrival transfer areas increases airspace flexibility, and removes the restrictions (i.e., established structure) inherent in the corner post system. Departure routes would be located between the arrival transfer areas and routes. Arrivals and departures would be segregated and traffic in a given ATC sector would be traveling in the same direction. In areas where arrival and departure routes would cross, routes would narrow and would be designed for minimal interaction and interdependency between aircraft.

Some of the specific differences between Alternative 3b and the No Action alternative are:

- A more direct routing of BWI late night southwestbound departures from Runway 28 would be established.
- A new high left downwind pattern would be created for IAD arrivals to Runway 01L.
- A more direct routing to new departure fixes for DCA Runway 04 departures, both north- and southbound, would be created.
- A more direct routing for ADW westbound departures would be established.
- All north- and westbound departures off of Martin State Airport's Runway 15 would initially make a left rather than a right turn after departing the airfield.
- Philadelphia arrivals routed through PCT would be routed more directly to their destination.

All the Action Alternatives would include a significant redesign of the PCT airspace structure, thus yielding improvements in operational efficiency. The alternatives would require varying degrees of coordination and transfer of control with adjacent ATC facilities; thus, the ease and timeliness of implementation are also important criteria in selecting the alternative for implementation.

Section 4 Environmental Impacts

This section summarizes the principal findings of the Airspace FEIS with respect to environmental consequences of the impact categories examined. Impact categories are those identified in FAA Order 1050.1D that are relevant to this decision. Nineteen impact categories were analyzed in the FEIS. Additional details can be found at Chapter 4 of the FEIS.

Examination of potential environmental impacts indicates that no significant impacts would result from the implementation of any of the alternatives considered in the FEIS for any of the impacts studied, although impacts would likely be generated for some impact categories. These potential impacts are summarized below.

Noise

The FAA has considered the matter of threshold levels above which aircraft noise causes an adverse impact on people. The FAA and other federal agencies have established DNL 65 dB as the threshold above which aircraft noise is considered not to be compatible with residential land use. FAA criteria recognizes that a significant impact occurs if a proposed action would result in an increase of DNL 1.5 dB or more on any noise sensitive area exposed to DNL greater than or equal to 65 dB.

In 1992, the Federal Interagency Committee on Noise (FICON) recommended that, where there is a significant noise impact, the FAA conduct further analysis. FICON recommended that the FAA evaluate noise levels between DNL 60 and 65 dB for potential increases in DNL greater than or equal to 3 dB. The FAA adopted FICON's recommendation into FAA Order 1050.1D, Change 4.

In the EIS, increases of 3 dB in areas that would be exposed to DNL between 60 dB and 65 dB were considered to have slight-to-moderate impacts. Additionally, increases of 5 dB or greater in areas that would be exposed to DNL between 45 dB to 60 dB are also considered to be slight-to-moderate impacts. The increase in noise at these levels is enough to be noticeable and potentially disturbing to some people, but the cumulative noise level and the magnitude of the change are not high enough to constitute a significant impact.

Alternative 1. Applying the FAA impact thresholds, the change in aircraft DNL relative to the No Action Alternative would result in slight-to-moderate impact or relief in several small geographic areas in 2005. These areas are shown in Figure 4-11 of the FEIS. Approximately 75,866 people are projected to reside in the areas of impact and approximately 152,297 people are predicted to reside in the areas of relief. No significant impact would result from noise increases of Alternative 1 because noise will not increase by DNL 1.5 dB in census blocks with noise levels above DNL 65 dB.

Alternative 2. The change in aircraft DNL relative to the No Action Alternative would result in slight-to-moderate impact or relief in several small geographic areas in 2005. These areas are shown in Figure 4-17 of the FEIS. Approximately 15,669 people are projected to reside in the areas of impact and approximately 44,541 people are predicted to reside in the areas of relief. No significant impact would result from noise increases of Alternative 2 because noise will not increase by DNL 1.5 dB in census blocks with noise levels above DNL 65 dB.

Alternative 3b. The change in aircraft DNL relative to the No Action Alternative would result in slight-to-moderate impact or relief in several small geographic areas in 2005. These areas are shown in Figure 4-23 of the FEIS. Approximately 101,215 people are

projected to reside in the areas of impact and approximately 79,359 people are predicted to reside in the areas of relief. No significant impact would result from noise increases of Alternative 3b because noise will not increase by DNL 1.5 dB in census blocks with noise levels above DNL 65 dB.

Compatible Land Use

Since there is no construction associated with the proposed action, land use compatibility is dependent on noise impact. The proposed alternatives do not result in significant noise impacts. Additionally, noise levels in the study area have been compared with the land uses for the area using the FAA land use compatibility table and they are compatible. Therefore, the project is compatible with current and projected land uses .

Socioeconomic Impacts and Environmental Justice

Although some areas with large minority and low-income populations would experience a slight-to-moderate noise impact, other areas with the similar demographics would experience a slight-to-moderate reduction in noise impacts. None of these areas would experience any significant impacts as the result of any of the action alternatives considered in the EIS. Therefore, the proposed alternatives would not impose a change that would disproportionately impact minority or low-income households for any of the impact categories considered.

Section 303(c) Resources

As set forth in FAA Order 1050.1D, Change 4, a project is compatible with the Section 303(c) property if it would not affect the normal activity or aesthetic value of a public park, recreation area, refuge, or historic site. The Proposed Action does not include any construction or other ground disturbance and thus would not use any Section 303(c) property. Although the Proposed Action will not use any Section 303(c) property, aircraft noise could constitute a "constructive use" if it would substantially impair the value of the property in terms of prior significance or enjoyment.

In 2005, Alternative 1 would have a slight-to-moderate impact on parts of nine Section 303(c) properties. In 2010, Alternative 1 would have a slight-to moderate noise impact on one fewer property. Even with the increase in noise over these properties, the noise level would remain below DNL 65 dB. The increase in noise over these properties would not substantially impair the value or significance of any of the properties affected by Alternative 1 nor affect the normal activity at any of the properties. No constructive use of Section 303(c) properties would occur with Alternative 1.

For Alternative 2, parts of 7 Section 303(c) properties would experience a slight-to-moderate impact in 2005. In 2010, Alternative 2 would have a slight-to moderate noise impact on one fewer property. Despite the increase in noise, the noise exposure of these properties would remain below DNL 65 dB. The value and significance of the Section 303(c) properties affected by Alternative 2 would not be substantially impaired as a result

of the noise increase, nor would the normal activities of the properties be affected. Under Alternative 2, no constructive use of Section 303(c) properties would occur.

Thirteen Section 303(c) properties would be slightly-to-moderately impacted in 2005 by Alternative 3b. Two additional Section 303(c) properties would be slightly-to-moderately impacted by Alternative 3b in 2010. The noise exposure for these properties would remain below the DNL 65 dB even with the increase in noise level. The increase in noise over these properties as a result of Alternative 3b would not substantially impair their value in terms of prior significance and enjoyment nor would it change their normal activity. Alternative 3b would not constitute a constructive use of Section 303(c) properties.

Historical, Architectural, Archaeological, and Cultural Resources

The Proposed Action will not have an adverse effect on historic and cultural resources, because it will not diminish the integrity of any resource's location, design, setting, materials, workmanship, feeling, or association. Therefore, no Section 106 consultation is required. There will be no significant impacts relating to historical, architectural, archaeological and cultural resources.

Fish, Wildlife, and Plants (Specifically Migratory Birds)

The Proposed Action presented in the EIS involves flight paths that are generally above 3,000 feet above ground level. Analysis in the FEIS indicates that 91% of bird strikes occur below 3,000 feet. Therefore, based on the available information from the FAA National Wildlife Strike Database, it was concluded that the impacts to migratory bird patterns resulting from the proposed alternatives would be minimal and not significant. There are no other significant impacts foreseen for these resources.

Air Quality

The final rule for Determining Conformity of General Federal Actions to State and Federal Implementation Plans, (40 CFR Parts 6, 51, and 93), was published in the Federal Register in 1993. In Section 51.853 (c)(1), the Environmental Protection Agency (EPA) lists actions that are *de minimis* and, thus, do not require an applicable analysis under this rule. EPA states in the preamble to this regulation that it believes, "air traffic control activities and adopting approach, departure, and en route procedures for air operations" are illustrative of *de minimis* actions. Agency coordination with the EPA confirmed that the proposed actions examined in this EIS are exempt from analysis under the General Conformity Rule. Qualitatively, reduction of delay and more efficient flight routings should serve to reduce fuel burn and thereby reduce air pollutant emissions.

The proposed alternatives would not induce additional vehicular traffic because they are intended to accommodate the existing and forecast demand. Therefore, none of the alternatives considered would result in negative impacts to air quality.

Cumulative Impacts

The FEIS provided a detailed discussion of ongoing and projected aviation projects in the Baltimore-Washington area that were assessed from the cumulative impact perspective. No significant cumulative impact is expected to result from the proposed action.

Other Impact Categories

There are no significant impacts projected for the remaining impact categories.

Section 5 Mitigation

There are no significant impacts associated with the proposed action; therefore, no mitigation measures are addressed in the FEIS and none are required. However, in developing the alternatives that were considered in the EIS, the design team was sensitive to the potential for noise impacts. As stated in Section 2.3 of the EIS, reduction of environmental impact was one of the airspace design objectives.

Section 6 Public and Agency Involvement

On September 3, 1999, the FAA published a Notice of Intent (NOI) to prepare an EIS in the Federal Register. Formal scoping occurred from September 3, 1999 to December 3, 1999. During this period, public and agency scoping meetings were held at six different locations in the study area. Members of the agencies and the public were given 90 days to provide comment.

In addition to the scoping meetings, 86 letters were sent to agencies with jurisdiction or special knowledge relative to the Airspace Redesign EIS. Twenty-nine organizations responded to the letters by the requested due date.

FAA published a Notice of Availability of the DEIS in the Federal Register on February 27, 2002 (67 FR 9019). Subsequently, on March 18, FAA published a Notice in the Federal Register (67 FR 12078) that detailed the times, dates and locations for 11 public hearings on the DEIS. Paid advertisements for the public hearings were placed in the Washington Post and Baltimore Sun on March 19 and 20, 2002. Further, FAA mailed or emailed information about the DEIS, public hearings and comment process to approximately 2,000 community and other potentially interested organizations and individuals. Individuals who received only the Executive Summary were informed that a complete DEIS was available upon request. Finally, the Executive Summary of the DEIS and information about the public hearings was placed on the Potomac TRACON web site. A total of 126 people registered at the 11 public hearings and 55 comment letters were received during the 90-day comment period on the DEIS. Comments were responded to in the FEIS.

A Notice of availability of the FEIS was published in the Federal Register on January 22, 2003 (68 FR 3089). Copies or notification of release of the FEIS were provided to all the individuals and organizations on the distribution list. The Executive Summary of the FEIS is available on the PCT web site and the address for that site was widely circulated.

The FAA has hosted or participated in a series of meetings with the general public and agencies with interest in the Potomac Airspace Redesign project throughout the development of the EIS. The Potomac Airspace Redesign project also established an 800 number ((800) 762-9531) for the public to use in contacting the Project staff. Additionally, a world wide web site for the Potomac Airspace Redesign Project provides background, information, and points of contact for the project. This website is at www.faa.gov/ats/potomac.

Section 7 Comments on the FEIS

The FAA received five comment letters on the FEIS. Comments and the FAA response are provided below:

U. S. Environmental Protection Agency (EPA), Region III

Comment: EPA has reviewed the FEIS and has determined that the FEIS has adequately addressed EPA comments on the DEIS.
Response: Comment noted.

Fairfax County, Virginia

Comments related to four primary areas as follows:

Comment 1: More information and analysis should have been provided for changes of less than 5 dB below 60 dB and less than 3 dB below 65 dB. The FEIS Appendix provides so much data that it is difficult to draw conclusions from the data.
Response: FAA provided a detailed response to a similar comment from Fairfax County (Comment 16) in the FEIS. Low value noise level changes are not expected to cause impact as discussed in Section 4.1.1 of the FEIS. Additionally, analysis of the reasons for all these low level changes is not reasonable nor required, since they do not meet the criteria for impact defined by FAA and other federal agencies. Data is provided in the FEIS in electronic form to allow organizations to perform more detailed analysis if they desired.

Comment 2: Population projection at the census block level may not have been accurate enough.
Response: The reason for population projection stems from the need to compare the relative impacts of the alternatives being considered. As discussed in Appendix C of the FEIS, the population projections used by FAA provide a reasonable basis for making the comparison.

Comment 3: It is not clear if any actual field data have been obtained to confirm the results predicted by the NIRS model.
Response: Fairfax County made a similar comment on the DEIS (Comment 5). FAA provided a detailed response to the comment in the FEIS. Additionally, it is noted that NIRS provides the best available technology to evaluate noise impacts in regional airspace studies. The FAA's Integrated Noise Model (INM) is not as well suited for studies that involve multiple airports, large geographic areas and aircraft at the altitudes above 3000 feet.

Comment 4: There should be a program of follow-up noise monitoring, review and possibly refinement of routes after implementation of the new airspace.
Response: Fairfax County made a similar comment on the DEIS (Comment 19). FAA's response continues to be that if changes are required after implementation of the redesigned airspace, these changes will be subject to appropriate environmental review.

Airline Owners and Pilots Association (AOPA)
Two comments were provided:

Comment 1: Alternative 1 closely parallels the objectives set forth in the FAA's Operational Evolution Plan.
Response: Comment noted.

Comment 2: AOPA recommends establishment of satellite ATC positions to work over flights and satellite airport traffic.
Response: Comment noted.

Washington Airports Task Force (WATF)
Comment: WATF recommends selection of the alternative (other than no action) that can be most expeditiously implemented.
Response: Comment noted.

Maryland Department of Planning, State Clearinghouse Review Process
Comment: Numerous State organizations have been requested to respond directly to FAA no later than February 13 if they have comments. No other comments were received from Maryland agencies during the comment period. The Maryland Department of the Environment provide a late comment stating that the project is consistent with that Agency's plans, programs and objectives.

Section 8 Agency Findings

The FAA makes the following finding for this proposed action, based upon appropriate evidence set forth in the EIS and other portions of the administrative record.

A. Airspace redesign will ensure the safety of aircraft and the efficient use of airspace. (49 U.S.C. §40103(b))

The Federal Aviation Act of 1958 give the Administrator the authority and responsibility to assign by order or regulation the use of the navigable airspace in order to ensure the safety of aircraft and the efficient use of the airspace. In its effort to continually ensure safety of aircraft and improve the efficiency of transit through the navigable airspace, the FAA will modify aircraft routes and air traffic control procedures used in a 23,000 square mile area around Washington, D.C. (the study area). Alternative 2 will more efficiently deliver aircraft to and from major airports in the study area, with limited affect on other airports in the study area. This will enhance the efficiency of the navigable airspace, while reducing the environmental impact of aircraft operations in the Baltimore-Washington metropolitan area.

In selecting Alternative 2, the FAA evaluated a full range of alternatives for airspace redesign. Alternative 2 will best accomplish the goals of airspace redesign, enhance safety of aircraft, protect persons and property on the ground, and improve the efficiency of the airspace. Additionally, it will do so with the least impact on people residing in the study area and lead to a slight-to-moderate net reduction noise in impact.

B. This project would not involve any construction which may affect historic sites. The Proposed Action includes all practicable measures to minimize harm resulting from it. (49 U.S.C. Section 303c)

The Proposed Action does not involve physical development of airport facilities. Additionally the forecast number of aircraft operations at the study area airports is the same with or without project implementation. Implementation of Alternative 2 would not result in a significant increase in noise impact at any location. Therefore, no impact would occur from actual and/or constructive use of historic properties.

C. There are no disproportionately high or adverse human or environmental effects from the project on minority or low-income populations. (Executive Order 12898)

The Proposed Action would not adversely affect any minority or low-income group. The Final EIS demonstrated that no significant environmental impacts would occur in any resource category. Therefore, it is concluded that the Proposed Action would not have a disproportionately high or adverse effect on minority or low-income communities.

D. Clean Air Act, Section 176(c)(1) Conformity Determination for Potomac Consolidated TRACON Airspace Redesign (42 U.S.C. Section 7506 (c))

The determination prescribed by this statutory provision is a precondition for Federal agency support or approval more typically associated with airport development projects. The USEPA regulations generally governing the conformity determination process are

found at 40 CFR Part 93, Subpart B, Sections 93.154 through 93.159; 40 CFR Part 50; and 40 CFR Part 51, Appendix W.

The PCT Airspace Redesign would not result in development of physical facilities. In addition, forecast number of aircraft operations in the study area is the same with or without project implementation.

In addition to the de minimis exemptions listed in Section 51.853 (c)(2) of the Final Rule for Determining Conformity of General Federal Actions to State and Federal Implementation Plans, the Environmental Protection Agency states in the preamble to this regulation that it believes, "Air traffic control activities and adopting approach, departure, and en route procedures for air operations are illustrative of de minimis actions." As such, the Proposed Action is exempt from General Conformity by 40 CFR Part 51, and no further reporting is required. In fact, because the Proposed Action would reduce airborne delay and, in turn, reduce aircraft emissions, the project would enhance air quality.

E. The FAA has given this proposal the independent and objective evaluation require by the Council on Environmental Quality (40 CFR 1506.5)

As described in the PCT Airspace Redesign Final EIS and in Section 3 of this ROD, FAA employed a detailed process in identifying reasonable alternatives that led to identification of a preferred alternative. Throughout, numerous FAA air traffic control specialists provided expertise and guidance on technical matters that arose during the formative steps. The FAA evaluated the technical feasibility of the Proposed Action and solely determined the alternatives to be evaluated for potential implementation. The proposed PCT Airspace Redesign represents the best judgment of the FAA in its key area of expertise: safe, orderly and expeditious movement of air traffic.

Similarly, the FAA has conducted an independent review of the factual assumptions contained in the PCT Airspace Redesign Final EIS. The process began with a competitive selection of an independent EIS contractor, continued throughout preparation of a Draft EIS and Final EIS and culminated in this ROD. Individuals from the FAA have devoted many hours to ensure compliance with the National Environmental Policy Act and other environmental requirements. The Agency's responses to the public comments on the environmental impacts of the Proposed Action are detailed and comprehensive. This ROD also describes the great care and attention that was paid to public environmental concerns, particularly noise. Accordingly, the independent and objective evaluation called for by the Council on Environmental Quality has been provided.

Section 9 Agency Decision

Alternative 2 was selected for several reasons that are summarized below:

- Environmental impact – Alternative 2 will have the least impact on people residing in the study area. Relative to the No Action alternative, 15,660 of the

approximately 9.5 million people projected to reside in the study area in 2005 would be impacted by noise. None of the impact would meet the criteria for significant impact. Both Alternatives 1 and 3 would impact considerably more people (75,866 and 101,215 respectively).

- Implementablity – Alternative 2 has the least implementation risk among the alternatives considered. Since this alternative uses existing ingress and egress points, and the other two alternatives do not, it would require the least amount of training and familiarization for controllers. Additionally, Alternative 2 would require the least amount of coordination with other air traffic control facilities.
- Cost/benefit – Although Alternative 2 does not provide the highest benefit, it should reduce overall costs.

Section 10 Conclusion

After careful and thorough consideration of the facts contained herein, the undersigned finds that the proposed Federal action is consistent with existing national environmental policies and objectives as set forth in Section 101 (a) of the National Environmental Policy Act of 1969 (NEPA) and that it will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to Section 102(2)(C) of NEPA.

Having carefully considered the aviation safety and operational objectives of this action, as well as being properly advised as to the anticipated environmental impacts, under the authority delegated to me by the Administrator of the FAA, I find that the action is reasonably supported, and I, therefore, direct the implementation of the revised airspace routes, altitudes and procedures identified as Alternative 2 in the FEIS.

This decision is taken pursuant to 49 U.S.C. §§40101 et seq., and constitutes an order of the Administrator that is subject to review by the Court of Appeals of the United States in accordance with the provisions of 49 U.S.C. §46110.

Approved by:

Richard J. Ducharme

Date: 5/1/03

Richard J. Ducharme
Manager, Air Traffic Division, AEA-500